

REMARKS

Claims 1-17 continue to be the pending claims in the application.

Reconsideration of the application in light of the remarks which follow is respectfully requested.

Double Patenting Rejection

Claims 1-17 stand rejected under the judicially created doctrine of obviousness-type double patenting as being allegedly unpatentable over claims 1-27 of U.S. Patent No. 6,872,440, claims 1-13 of U.S. Patent No. 6,858,550, claims 1-14 of U.S. Patent No. 6,586,353, claims 1-11 of co-pending U.S. Patent Application No. 10/354,216, claims 1-11 of co-pending U.S. Patent Application No. 10/354,220, claims 1-20 of U.S. Patent Application No. 10/766,649, claims 1-19 of co-pending U.S. Patent Application No. 10/766,652, claims 1-21 of U.S. Patent Application No. 10/766,654, and claims 1-15 of co-pending U.S. Patent Application No. 10/354,219.

In response to the rejection of the claims under the judicially created doctrine of obviousness-type double patenting in view of claims 1-20 of U.S. Patent Application No. 10/766,649 and claims 1-21 of U.S. Patent Application No. 10/766,654, Applicants provide herewith a Terminal Disclaimer disclaiming the terminal part of the statutory term of any patent granted on the present application which would extend beyond the expiration date of any patents granted on Application Nos. 10/766,649 and 10/766,654, both filed on January 27, 2004, the same day the present application was filed.

Applicants respectfully traverse the rejection of the claims under the judicially created doctrine of obviousness-type double patenting in view of the other aforementioned co-pending U.S. Patent Applications and U.S. Patents. Nonstatutory-type double patenting prohibits claims in a second patent that are not patentably distinct from claims in a first patent.

See MPEP § 804. However, the claims of the current application are distinct from the claims of the aforementioned patents and co-pending patent applications. In particular, the claims of U.S. Patent Nos. 6,872,440, 6,858,550, 6,586,353 and co-pending U.S. Patent Application Nos. 10/354,219, 10/354,220 and 10/354,216 do not recite the metallic component element of the present claims.

Further, the claims of U.S. Patent Nos. 6,872,440, 6,858,550, 6,586,353 and co-pending U.S. Patent Application No. 10/766,652 do not recite a composite material comprising, *inter alia*, a layer which comprises a surfactant component, surfactant-generated microcells, a filler component and a binder component.

For all the aforementioned reasons, Applicants assert that the present claims are patentably distinct from the aforementioned U.S. Patents and co-pending U.S. Patent Application Nos. 10/354,219, 10/354,220, 10/354,216 and 10/766,652. Accordingly, Applicants respectfully request withdrawal of the rejection of the claims under the judicially created doctrine of obviousness-type double patenting.

Claim Rejections - 35 U.S.C. § 103 over EP 0391000 in view of Ahluwalia

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0391000 (EP '391) in view of Ahluwalia (U.S. Patent No. 5,965,257). The Examiner alleges that EP '391 discloses the claimed invention except for the teaching that the fabric coating contains a surfactant or surfactant generated microcells. The Examiner concedes that EP '391 fails to disclose a water repellent material, an anti-fungal material, an antibacterial material, a surface friction agent, an algicide, and a dye. The Examiner asserts that Ahluwalia discloses coated structural articles comprising a substrate wherein the coating consists essentially of a filler material and a binder material, and wherein the binder comprises an acrylic latex, specifically Hycar 2679. The Examiner equates Hycar 2679 as a surface active agent or surfactant. The Examiner further asserts that the structural article of Ahluwalia

may be coated with a water repellent material, an algacide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and/or a coloring dye. The Examiner then contends that it would have been obvious to have used Ahluwalia's specific Hycar 2679 polymer latex that contains a surfactant in the composition of EP '391. The Examiner further contends that it would also have been obvious to have used Ahluwalia's water repellent material, antifungal material, antibacterial material, surface friction agent, algacide and dye on the product of EP '391.

The Claimed Invention

Claims 1 relates to a composite material comprising a first layer which comprises a surfactant component, surfactant-generated microcells, a gel catalyst component and a binder component and a second layer comprising a metallic component adhered to the first layer. Claim 2 covers a composite material comprising a substrate, a first layer adhered to the substrate to provide a coated substrate, and a second layer, adhered to the coated substrate wherein the first layer comprises a surfactant component, surfactant-generated microcells, a gel catalyst component and a binder component, and wherein the second layer comprises a metallic component. Claims 3-17 are dependent on claim 2 or claims 1 or 2 or claims dependent thereon.

The Prior Art

EP '391 discloses a fire-resistant fabric characterized by a flame durable textile fabric substrate formed of corespun yarns and an intumescent coating layer carried by one surface of said textile fabric substrate, wherein said yarns comprise a core of a flame resistant filament and a sheath of staple fibers, and wherein said intumescent coating layer comprises a carbonific compound, a catalyst and a source of a non-flammable gas. The catalyst disclosed in EP '391 causes the carbonific compound to swell and char upon exposure to flame. *See* page 3, line 49. The source of non-flammable gas acts as a foaming or blowing agent and may

be provided by the catalyst.

Ahluwalia teaches a structural article comprising a substrate having an ionic charge coated with a coating having essentially the same ionic charge wherein said coating consists essentially of a filler material and a binder material and wherein said binder material bonds the filler material together and to the substrate and wherein said coating does not bleed through said substrate. The structural article may further be coated with a water repellent material, an antifungal material, an antibacterial material, a surface friction agent, or an algicide.

There is No *Prima Facie* Case of Obviousness

The combination of EP '391 and Ahluwalia does not support a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the combined references must teach or suggest all the claimed limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and must not be based on the Applicants disclosure. *In re Vaeck*, 947 F2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991); MPEP § 2142.

The Examiner equates the catalyst in EP '391 to the gel catalyst component of the present invention. EP '391 teaches that the catalyst causes the carbonific compound in the coating to swell and char on exposure to flame. *See* EP '391 page 3, line 49. In contrast, the present specification teaches a gel catalyst component that catalyzes gel formation. *See* Specification page 10, paragraph 30. Other catalysts may also be added to promote vulcanization, to provide permanent cross-linking and to thermoset the first layer which can enhance the strength of the surfactant-generated microcell structure. *See id.*

The meaning of words used in a claim is not construed in a lexicographic vacuum, but in the context of the specification and drawings. *See Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 53 USPQ2d 1065 (Fed. Cir. 1999). Accordingly, Applicants respectfully disagree with Examiner's equation of the catalyst of EP '391 and the gel catalyst in the present invention. The combination of EP '391 and Ahluwalia, at best, teaches or suggests a flame durable textile fabric substrate formed of corespun yarns and an intumescent coating layer carried by one surface of said textile fabric substrate, wherein said intumescent coating layer comprises a carbonific compound, a catalyst, a source of a non-flammable gas, and an acrylic latex as disclosed in Ahluwalia, and wherein said catalyst causes said carbonific compound to swell and char upon exposure to flame. There is no teaching or suggestion anywhere in EP '391 or Ahluwalia of a gel catalyst that is capable of catalyzing gel formation. As noted above, in order for the Examiner to make out a *prima facie* case of obviousness, the combined references must teach or suggest all the claimed limitations, which the combined teachings of EP '391 and Ahluwalia fail to do.

Accordingly, Applicants respectfully request withdrawal of the rejection of the claims under 35 U.S.C. §103(a) as obvious over EP '391 in view of Ahluwalia.

Claim Rejections - 35 U.S.C. § 103 over Horner et al. in view of Fidler et al. and Ahluwalia

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Horner Jr. et al. (U.S. Patent No. 6,365,533) in view of Fidler et al. (U.S. Patent No. 6,136,216) and Ahluwalia (U.S. Patent No. 5,965,257). The Examiner alleges that Horner Jr. et al. discloses the claimed invention except for the teaching of a gel catalyst component and that the composite material further requires water repellent material, antifungal material, antibacterial material, a surface friction agent, and an algacide. The Examiner asserts that Fidler et al. discloses an insulative composition that can be made in sheets or loose fill,

wherein said composition comprises fiberglass, acrylic latex binder, a surfactant and a clay filler, and wherein said composition can further include a gelatin crosslinker. The Examiner further asserts that Ahluwalia discloses coated structural articles comprising a glass fiber substrate wherein the coating consists of a latex and a filler, and wherein said structural articles may be coated with a water repellent material, an antifungal material, an antibacterial material, a surface friction agent, and an algicide. The Examiner then contends that it would have been obvious to have used Fidler's gelatin crosslinker and Ahluwalia's water repellent material, antifungal material, antibacterial material, surface friction agent and algicide on the glass mat of Horner Jr. et al.

There is No *Prima Facie* Case of Obviousness

Horner Jr. et al. discloses a facer member for use in the construction industry comprising a preformed fiber mat substrate coated with a prefoamed, self-sustaining foam mixture. The facer member disclosed by Horner Jr. et al. can be used to manufacture insulation boards comprising thermosetting or thermoplastic foam cores disposed between a pair of facer members laminated to the foam core surfaces. *See* Horner Jr. et al. col. 5, lines 34-39. Horner Jr. et al. further indicates that the insulation boards may be manufactured with a facer member laminated to one side of the foam core and aluminum foil laminated to the other side of the foam core. *See* Horner Jr. et al. col. 6, lines 3-10.

Fidler et al. teaches an insulative composition comprising an aqueous gelatin solution and an aerogel, wherein said composition may further comprise a dye, a surfactant, a fungicide and/or pesticide, a gelatin crosslinker, a binder, an opacifier, and a fiber component. The gelatin crosslinker crosslinks the aqueous gelatin.

Ahluwalia teaches a structural article comprising a substrate having an ionic charge coated with a coating having essentially the same ionic charge wherein said coating consists essentially of a filler material and a binder material and wherein said binder material

bonds the filler material together and to the substrate and wherein said coatings does not bleed through said substrate. The structural article may further be coated with a water repellent material, an antifungal material, an antibacterial material, a surface friction agent, or an algaecide.

The combination of Horner Jr. et al., Fidler et al. and Ahluwalia does not support a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria which are enumerated above must be met.

In this case, there is no suggestion or motivation in any of the cited references to alter Horner Jr. et al. to produce a composite material according to the present claims. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Horner Jr. et al. teaches facer members which are used to manufacture an insulation board having a foam core with a facer member laminated on both sides. Aluminum foil may be used to substitute one of the facer members to manufacture the insulation board having aluminum foil laminated to one side of the foam core and a facer member laminated to the other side. *See* Horner Jr. et al. col. 5, line 64-67 to col. 6, lines 1-10. In contrast, the presently claimed composite material comprises at least a first and a second layer, wherein the second layer is a metallic component and wherein the second layer is adhered to the first layer or coated substrate. The combination of Horner Jr. et al., Fidler et al. and Ahluwalia would, at best, suggest to a skilled artisan to make an insulation board comprising a foam core with a preformed fiber mat substrate of Horner Jr. et al. laminated on one side and aluminum foil laminated on the other side, wherein said substrate is coated with a prefoamed, self-sustaining foam mixture having a gelatin crosslinker, and wherein said substrate is further coated with a water repellent material, an antifungal material, an antibacterial material, a surface friction agent, or an algaecide. The

element of the present claims that the metallic component is adhered to the first layer or to the coated substrate is not found anywhere in Horner Jr. et al., Fidler et al. or Ahluwalia, whether taken alone, or in combination. As noted above, in order for the Examiner to make out a *prima facie* case of obviousness, the combined references must teach or suggest all the claimed limitations which the combined teachings of Horner Jr. et al., Fidler et al. and Ahluwalia fail to do.

Accordingly, Applicants respectfully request withdrawal of the second rejection of the claims under 35 U.S.C. §103(a) as obvious over Horner Jr. et al. in view of Fidler et al. and Ahluwalia.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that the present invention is now in condition for allowance. Accordingly, favorable reconsideration of the application is earnestly solicited. Please send any further correspondence relating to this application to the undersigned attorney at the address below.

Applicants believe no fee is due in connection with this communication. However, should any fee be due in connection with this communication, the Commissioner is authorized to charge any such fee to Deposit Account No. 06-1205.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "John D. Murnane", is written over a horizontal line.

John D. Murnane
Registration No. 29,836

Alicia A. Russo
Registration No. 46,192

Attorneys for Applicants

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200

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